



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,511	10/17/2001	Raymond J. Iannuzzelli	1662-46500 JMH (P01-3668)	6896

22879 7590 12/11/2003

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

LEON, EDWIN A

ART UNIT	PAPER NUMBER
----------	--------------

2833

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/981,511

Applicant(s)

IANNUZZELLI ET AL.

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-13 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-13, and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2833

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed October 2, 2003, Claims 11, and 20 have been amended, and new Claims 25-30 have been added, has been place of record in the file as Paper No. 12.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 11-13, and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Lin et al. (U.S. Patent No. 6,412,546). With regard to Claim 1, Applicant's admitted prior art discloses a component restraint computer system that is used to secure an electronic component (10) to a circuit board (22), comprising a backing plate (14); a spring (18); and a post (20) extending from the backing plate (14). See Fig. 1 and Pages 1-3.

Applicant's admitted prior art doesn't show a clip inserted onto the post, and pushed down the post towards the backing plate until the clip engages the stop surface

Art Unit: 2833

of the post, the clip compressing the spring as the clip is pushed toward the stop surface.

Lin et al. discloses a system using a clip (50) inserted onto a post (66), being pushed down the post (66) until the clip (50) engages a stop surface (664) of the post (66). See Figs. 1-5 and Column 2, Lines 45-47.

Thus, it would have been obvious to one with ordinary skill in the art to modify the system of Applicant's admitted prior art by including a clip inserted onto a post, being pushed down the post until the clip engages a stop surface of the post as taught in Lin et al. to improve the contact pressure between the parts.

However, the combination of Applicant's admitted prior art and Lin et al. does not show the posts having a plurality of stop surfaces.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one stop surface in each post, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It is deemed inherent that the combination's plurality of stop surfaces would permit the spring to be variably compressed.

With regard to Claims 2 and 4, Lin et al. discloses the post (66) having an upper end distal (662) and the clip (50) for each post (66) is pushed down over the upper end until the clip (50) engage the stop surface (664) of the posts (3). See Figs. 1-5 and Column 2, Lines 45-47.

Art Unit: 2833

With regard to Claim 3, Applicant's admitted prior art discloses four posts (20) protruding from the backing plate (14) and including stop surfaces (16), each post (20) having a spring (18) disposed thereon. See Fig. 1 and Pages 1-3.

With regard to Claim 5, Applicant's admitted prior art discloses the electronic component (10) and circuit board (22) being disposed between the backing plate (14) and the springs (18) and the electronic component (10) is secured to the circuit board (22). See Fig. 1 and Pages 1-3.

With regard to Claim 6, Applicant's admitted prior art discloses the heat sink (12) also disposed between the backing plate (14) and the springs (18), the heat sink (12) further disposed between the electronic component (10) and the springs (18). See Fig. 1 and Pages 1-3.

With regard to Claim 7, Lin et al. discloses the upper ends (top of 662) of the post (66) comprise tips (top of 662) formed between the distal end (top of 662) of the post (66) and the stop surface (664), each tip (top of 662) having a smaller cross section at its distal end (top of 662) than at the stop surface (664). See Figs. 1-5 and Column 2, Lines 45-47.

With regard to Claim 8, Lin et al. discloses the upper end (top of 662) of the post (66) being substantially conically shaped. See Figs. 1-5 and Column 2, Lines 45-47.

With regard to Claim 9, Lin et al. discloses the clip (50) including protruding members (56), which define a hole (62) in which the post (66) is inserted, the protruding members (56) are pushed apart as the clip (50) is pushed along the post (66) towards the stop surface (664). See Figs. 1-5 and Column 2, Lines 45-47.

Art Unit: 2833

With regard to Claim 11-13, Applicant's admitted prior art discloses a component restraint computer system that is used to secure an electronic component (10) to a circuit board (22), and having a processor and heat sink (12); an output device coupled to the processor comprising: a backing plate (14); a plurality of springs (18); a plurality of posts (20) extending from the backing (flat) plate or surface (14) through the circuit board (22) and the springs (18), each post (20) having a stop surface (16); the electronic component (10) and heat sink (12) sandwiched between the circuit board (22) and the springs (18). See Fig. 1 and Pages 1-3.

Applicant's admitted prior art doesn't show a plurality of clips, one clip per post, which, when inserted onto the posts, are pushed down the posts towards the backing plate until the clips engage the stop surfaces of the posts, the clips compress the springs as the clips are pushed toward the stop surfaces.

Lin et al. discloses a system using a clip (50) inserted onto a post (66), being pushed down the post (66) until the clip (50) engages a stop surface (664) of the post (66). See Figs. 1-5 and Column 2, Lines 45-47.

Thus, it would have been obvious to one with ordinary skill in the art to modify the system of Applicant's admitted prior art by including a clip inserted onto a post, being pushed down the post until the clip engages a stop surface of the post as taught in Lin et al. to improve the contact pressure between the parts.

However, the combination of Applicant's admitted prior art and Lin et al. does not show the posts having a plurality of stop surfaces.

Art Unit: 2833

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one stop surface in each post, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It is deemed inherent that the combination's plurality of stop surfaces would permit each clip to compress the spring with different compressive forces and in any number of different positions.

With regard to Claims 20-30, Applicant's admitted prior art discloses a component restraint computer system that is used to secure an electronic component (10) to a circuit board (22), and having a processor and heat sink (12); an output device coupled to the processor comprising: a backing plate (14); a plurality of springs (18); a plurality of posts (20) extending from the backing plate (14) through the circuit board (22) and the springs (18), each post (20) having a stop surface (16); the electronic component (10) and heat sink (12) sandwiched between the circuit board (22) and the springs (18). See Fig. 1 and Pages 1-3.

Applicant's admitted prior art doesn't show a plurality of clips, one clip per post, which, when inserted onto the posts, are pushed down the posts towards the backing plate until the clips engage the stop surfaces of the posts, the clips compress the springs as the clips are pushed toward the stop surfaces and having a portion bent downward.

Lin et al. discloses a system using a clip (50) inserted onto a post (66), being pushed down the post (66) until the clip (50) engages a stop surface (664) of the post

Art Unit: 2833

(66) and having a portion (56) bent downward. See Figs. 1-5 and Column 2, Lines 45-47.

Thus, it would have been obvious to one with ordinary skill in the art to modify the system of Applicant's admitted prior art by including a clip inserted onto a post, being pushed down the post until the clip engages a stop surface of the post and having a portion bent downward as taught in Lin et al. to improve the contact pressure between the parts.

However, the combination of Applicant's admitted prior art and Lin et al. does not show the posts having a plurality of stop surfaces.

Still, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have more than one stop surface in each post, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It is deemed inherent that the combination's plurality of stop surfaces would permit each clip to engage the posts in different positions.

### ***Response to Arguments***

4. Applicant's arguments filed October 2, 2003 have been fully considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642



Art Unit: 2833

F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, In this case, it is the Examiner's opinion that one with ordinary skill in the art would find obvious to modify the system of Applicant's admitted prior art by including a clip inserted onto a post, being pushed down the post until the clip engages a stop surface of the post as taught in Lin et al. to improve the contact pressure between the parts.

In response to Applicant's arguments regarding Claims 1, 11, and 20 that the combination of Applicant's admitted prior art and Lin et al. doesn't show the posts having a plurality of stop surfaces and the clips engaging the posts in different positions to variably compress the spring, it is the Examiner's opinion that one having ordinary skill in the art would find obvious to have more than one stop surface in each post, since it has been held that mere duplication of the essential working parts of a device involves

Art Unit: 2833

only routine skill in the art. Furthermore, it is deemed inherent that the combination's plurality of stop surfaces would permit each clip to engage the posts in different positions and with different forces, which would make variable compression forces on the spring. The fact that the post can have a plurality of stop surfaces would cause the spring to be variably compressed depending on the location of the stop surface in the post.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

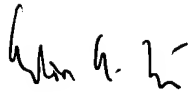
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 10:00-6:30.

Art Unit: 2833

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
Edwin A. Leon  
AU 2833

  
P. AUSTIN BRADLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

EAL  
December 5, 2003